

DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch
690 Walnut Ave.St. 150
Vallejo, CA 94592-1133
(707) 649-5453
(707) 649-5493

Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:**Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-002342**Date Inspected:** 11-May-2008**Project Name:** SAS Superstructure**OSM Arrival Time:** 1400**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 2300**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

CWI Name:	An Qingxiang and Chen Xi	CWI Present:	Yes	No	
Inspected CWI report:	Yes No N/A	Rod Oven in Use:	Yes	No	N/A
Electrode to specification:	Yes No N/A	Weld Procedures Followed:	Yes	No	N/A
Qualified Welders:	Yes No N/A	Verified Joint Fit-up:	Yes	No	N/A
Approved Drawings:	Yes No N/A	Approved WPS:	Yes	No	N/A
		Delayed / Cancelled:	Yes	No	N/A
Bridge No:	34-0006	Component:	obg deck panels and tower skin plates		

Summary of Items Observed:

On this day CALTRANS OSM Quality Assurance Inspector (QA) Steve Hall was present during the times noted above for observations relative to the fabrication of the SAS Superstructure being performed by Zhenhua Port Machinery Company (ZPMC) at Changxing Island, in Shanghai, China. QA observed and/or found the following:

New Tower Bay 1

QA observed ZPMC qualified welding personnel perform SAW on one side of the groove weld joining tower skin plates, weld# SSD1_SA17A/G-15A and SSD1-SA178-C/D-13 following the guide lines of approved WPS# WPS-B-T-2221-B-U3c-S. QA observed 5 ZPMC Quality Control (QC) inspectors in the vicinity of the welding operations including ZPMC CWI identified as An Qingxiang. There was also 1 American Bridge/Fluor (ABF) QC inspectors in the area as well. QC monitored the welding process continuously until its completion. The welding parameters as measured with Quality Controls calibrated instruments appeared to be in conformance with the posted WPS's and were as follows:

SSD1_SA17A/G-15A SAW

Volts: 33.4 Amps: 683 Travel speed: 700mm/min

SSD1-SA178-C/D-13 SAW

Volts: 32.5 Amps: 657 Travel speed: 590mm/min

WELDING INSPECTION REPORT

(Continued Page 2 of 3)

New Tower Bay 2

QA observed ZPMC qualified welding personnel perform SAW on one side of the groove weld joining tower skin plates, weld# WSD1-SA107-B/T-17B and WSD1-SA107B/T-16B following the guide lines of approved WPS# WPS-B-T-2221-B-U3c-S. QA observed 4 ZPMC Quality Control (QC) inspectors in the vicinity of the welding operations. There was also 1 American Bridge/Fluor (ABF) QC inspector in the area as well. QC monitored the welding process continuously until its completion. The welding parameters as measured with Quality Controls calibrated instruments appeared to be in conformance with the posted WPS's and were as follows:

WSD1-SA107-B/T-17B SAW

Volts: 32 Amps: 641 Travel speed: 624mm/min

WSD1-SA107B/T-16B SAW

Volts: 32.7 Amps: 633 Travel speed: 604mm/min

Other general observations

QA observed 100 to 120 ZPMC personnel flame straightening tower skin plate material, weld bevel preparation, back-gouging and grinding.

OBG Bay 1

QA observed the last SAW pass on deck panel DP-462-001 on Gantry 2. This appeared to be the only deck panel that was welded today.

QA performed visual verification inspection for completed Partial Joint Penetration (PJP) U-rib to deck plate welds on deck panel DP-248-001 weld W1. All welds that were inspected appeared to exhibit some degree of undercut, lack of fusion, overlap, oversize and/or under fill. All of the completed (PJP) welds joining U-Rib to deck plate that have inspected on this panel do not appear to comply with the visual acceptance criteria specified in AWS D1.5 2002 and the contract documents. QA completed a Caltrans QA visual verification weld inspection report concerning only the welds that were verified for the OBG deck panel mentioned above. The report is on file in the Caltrans QA office.



WELDING INSPECTION REPORT

(Continued Page 3 of 3)

Summary of Conversations:

Only general conversations were held between QA and QC concerning this project.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Patrick Lowry (858)-344-2712, who represents the Office of Structural Materials for your project.

Inspected By:	Hall,Steven	Quality Assurance Inspector
----------------------	-------------	-----------------------------

Reviewed By:	Cuellar,Robert	QA Reviewer
---------------------	----------------	-------------